Amendments to the Claims:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously present), or (not entered).

Applicant reserves the right to pursue any cancelled claims at a later date.

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.-19. (canceled)

20. (currently amended) A method for producing a hole in a superalloy metal turbine component by pulsed laser beams, wherein the hole comprises a first region ~~comprising a flat wall,~~ and a second region, the method comprising:

using a plurality of pulses of longer laser pulse length for rough machining the hole to produce an inner region of the hole;

using a plurality of pulses of shorter laser pulse length for removing an outer upper region of the hole to produce the ~~flat wall~~ first region; and

using ~~a~~ the plurality of pulses of longer laser pulse length to remove remaining first region material and to produce the second region,

wherein the inner region is removed using the plurality of pulses of longer laser pulse length after producing the first region, and

wherein the first region comprises a wider cross section than the second region.

21. (canceled)

22. (currently amended) A method for producing a hole in a component by pulsed laser beams, wherein the hole comprises a first region ~~comprising a flat wall,~~ and a second region, the method comprising:

using a plurality of pulses of longer laser pulse length for rough machining the hole to produce an inner region of the hole

generating a plurality of laser beams with different laser pulse lengths;

using a plurality of pulses of shorter laser pulse length in a first process step for removing an outer upper region of the hole ~~for producing~~to produce the ~~flat wall~~ first region;

using ~~a~~ the plurality of pulses of longer laser pulse length in a second process step for removing remaining first region material and for producing the second region;

diverting the laser beams onto the component via a plurality of mirrors, the mirrors physically separated from each other such that only one laser beam is directed onto the component at a time;

guiding the laser beams onto the component via an optical system;

wherein the component has a layer system which comprises a substrate and a ceramic or metallic layer, and the substrate is a nickel-base, cobalt-base or iron-base superalloy, and

~~the flat wall is formed in the superalloy substrate~~

wherein the inner region is removed using the plurality of pulses of longer laser pulse length after producing the first region, and

wherein the first region comprises a wider cross section than the second region.

23. (previously presented) The method as claimed in claim 22, wherein the laser pulse lengths are continuously increased as a formation of the hole from an outer surface of the component into a depth of the hole.

24. (previously presented) The method as claimed in claim 22, wherein in the first process step the laser pulse length of less than 100 ns is used and in the second process step the laser pulse length of greater than or equal to 50 ns and less than 10 ms is used.

25. (previously presented) The method as claimed in claim 24, wherein in the first process step the laser pulse length of less than 50 ns is used and in the second process step the laser pulse length of greater than or equal to 100 ns and less than 10 ms is used.

26. (cancelled).

27. (previously presented) The method as claimed in claim 22, wherein the metallic layer has a composition of MCrAlX,

wherein M is an element selected from the group consisting of iron, cobalt and nickel, and

X is yttrium and/or a rare earth element.

28. (cancelled).

29. (previously presented) The method as claimed in claim 22, wherein the component is a turbine component of a gas turbine or steam turbine selected from the group consisting of: a turbine blade, a turbine vane, and a combustion chamber lining.

30. (previously presented) The method as claimed in claim 22, wherein an outer upper region of the hole is produced first using the shorter laser pulse length in the first process step and a remaining region of the hole is produced using the longer laser pulse length in the second process step.

31. (currently amended) A method for producing a hole in a component by pulsed laser beams, wherein the hole comprises a first region ~~comprising a flat wall,~~ and a second region, the method comprising:

using a plurality of pulses of longer laser pulse length for rough machining the hole to produce an inner region of the hole;

generating a plurality of laser beams with different laser pulse lengths;

using a plurality of pulses of a shorter laser pulse length for removing an outer upper region of the hole ~~for producing~~to produce the ~~flat wall~~first region of the hole;

using ~~a~~ the plurality of pulses of a longer laser pulse length for removing remaining first region material and for producing a second region of the hole;

diverting the laser beams onto the component via a plurality of mirrors;

simultaneously guiding the laser beams onto the component via an optical system,

wherein the inner region is removed using the plurality of pulses of longer laser pulse length after producing the first region, and

wherein the first region comprises a wider cross section than the second region.

32. (canceled)

33. (previously presented) The method as claimed in claim 31, wherein the laser pulse lengths are continuously increased as a formation of the hole from an outer surface of the component into a depth of the hole.

34. (previously presented) The method as claimed in claim 31, wherein the laser pulse length of less than 100 ns is used for producing the first region of the hole and the laser pulse length of greater than or equal to 50 ns and less than 10 ms is used for producing the second region of the hole.

35. (previously presented) The method as claimed in claim 34, wherein the laser pulse length of less than 50 ns is used for producing the first region of the hole and the laser pulse length of greater than or equal to 100 ns and less than 10 ms is used for producing the second region of the hole.

36. (previously presented) The method as claimed in claim 31, wherein the component has a layer system which comprises a substrate and a ceramic or metallic layer.

37. (previously presented) The method as claimed in claim 36, wherein the metallic layer has a composition of MCrAlX,

wherein M is an element selected from the group consisting of iron, cobalt and nickel, and

X is yttrium and/or a rare earth element.

38. (previously presented) The method as claimed in claim 36, wherein the substrate is a nickel-base, cobalt-base or iron-base superalloy.

39. (previously presented) The method as claimed in claim 31, wherein the component is a turbine component of a gas turbine or steam turbine selected from the group consisting of: a turbine blade, a turbine vane, and a combustion chamber lining.